

Remarks

Following the above amendments, claims 1-3, 5, 7, 9-26, 28, and 30-34 are pending in this application. Claims 4, 6, 8, 27, and 29 have been cancelled herein by amendment. The examiner has rejected claims 2, 5, 7, 10, 13, 15-17, 20, 22, 23, 26, 28, 31, and 34 as being indefinite under 35 U.S.C. § 112 for failing to distinctly point out and particularly claim the subject matter of the invention. The examiner has rejected claims 1, 14, 21, and 22 as being invalid under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,581,104 to Bereiter. The examiner has rejected each 2, 3, 5, 7, 9-13, and 15-20 on the ground that these claims are obvious under 35 U.S.C. § 103 in view of the combination of Bereiter and U.S. Patent No. 6,609,213 to Nguyen et al. The examiner also rejected claims “23-34” for “similar reasons.” Given this statement by the examiner it is believed that the examiner meant to reject claims 23-26, 28, and 30-34 on the ground that these claims are obvious under 35 U.S.C. § 103 in view of the combination of Bereiter and Nguyen.

A. Section 112 Rejections

The examiner has rejected several pending claims of the application on definiteness grounds. Specifically, the examiner has rejected claims 2, 10, 15-17, 22, 23 and 31 on the basis of the use of the terms “highest,” “its maximum,” and “those.”

Claims 5, 7, 26, and 28 have been amended to clarify the server that is selected is the server that has the highest execution throttle “among the set of servers associated with the storage controller for which the rule was not satisfied.” (Claim 2). Thus, the amended claim sets out a subset of servers from which the server having the highest execution throttle can be selected.

Claims 13, 20, and 34 have been amended to clarify that each server is set to its respective maximum execution throttle level. Thus, there is not a single maximum execution throttle level that applies for all servers. Rather, each server is set to its maximum execution throttle level.

Finally, claims 2, 10, 15-17, 22, 23, and 31 have been amended to delete the reference to those and to include a clarification that the rule of the claims is applied for each storage controller and with respect to the servers associated with the storage controller. Applicants submit that any indefiniteness of the rejected claims has been resolved by the foregoing amendments. Applicants request that the indefiniteness rejections be withdrawn.

B. Bereiter Does Not Anticipate

Bereiter does not anticipate any of rejected claims 1, 14, 21, or 22. Claims 1, 14, 21, and 22 are directed to a storage area network and methods for operating a network such that the execution throttle of the servers of the network is managed relative to the command queue depth of the storage controllers of the network. Bereiter does not disclose storage controllers, and does not disclose a network that includes multiple storage controllers coupled to multiple servers. Importantly, Bereiter does not disclose a technique for managing the operation of the network by comparing the execution throttle of the servers of the network to the command queue depth of the storage controllers of the network. This claim element is simply not present in Bereiter.

The examiner points to column 8, lines 20-67 of Bereiter for the disclosure of a network that includes a comparison of the execution throttle levels of the servers to the command queue depth settings of the storage controllers of the network. This section of Bereiter, however, concerns the distribution of portions of a single processing task between endpoints in a network.

Example networks are shown in Figures 4A-4D and 5 of Bereiter. After distribution of the tasks among the endpoints of the network of Bereiter, a comparison is made in Bereiter between the effective load in each network path and a predetermined load parameter for the network path.

Bereiter is not applicable to the present invention. There is no mention in Bereiter of multiple servers and the execution throttle level of each. In contrast with the multiple servers recited in the claims, the networks of Figures 4A-4D and 5 of Bereiter each include a single source node or gateway. Further, there is no mention in Bereiter of storage controllers within the network and the command queue depth of each storage controller. In addition, the comparison step of Bereiter is not in any manner comparable to the comparison step of the rejected claims. Bereiter involves the distribution of a single processing task among endpoints of the network. In contrast, the rejected claims concern the regulation of the execution throttle of the servers of the network. Thus, the rejected claims concern the operating rate of the multiple servers of the network, while Bereiter concerns the distribution of a single processing task from a source node among the endpoints (computers) of a network. The present claims concern the operation or function of a network; in contrast, the passage of Bereiter quoted by the examiner concerns only the task of handling a single processing task. Bereiter does not disclose or in any manner suggest each of the elements of claim 1, 14, 21, and 22.

Because Bereiter does not disclose each element of claims 1, 14, 21, and 22, a rejection of these claims on anticipation grounds is improper. "A claim is not anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir 1987). "The identical invention must be shown in complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1336 (Fed. Cir 1989). With

respect to claims 1, 14, 21, and 22 of the present application, each and every element of claims 1, 14, 21, and 22 is not found in Bereiter. Specifically, Bereiter does not disclose or suggest a network in which the execution throttle settings of the servers of the network are compared against the command queue depth settings of the storage controllers of the network. Because the invention of claims 1, 14, 21, and 22 is not disclosed in Bereiter, the rejection of these claims should be withdrawn, and the claims should be passed to issuance.

C. Nguyen Cannot Serve as a Basis for a Rejection Under Section 103

Claims 2, 3, 5, 7, 9-13, 15-20, and 23-34 have been rejected as being obvious over the combination of Bereiter and Nguyen. Nguyen, however, cannot serve as the basis for a rejection under Section 103. Subject matter that is prior art for a rejection under 35 U.S.C. § 103 via 35 U.S.C. § 102(e) is disqualified as prior art if the subject matter and the claimed invention “were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.” 35 U.S.C. § 103(c). Here, at the time that the invention of the present application was made, the present application and Nguyen and the present invention were owned by or subject to an obligation of assignment to Dell Products L.P. Nguyen is assigned to Dell Products, L.P. Attached as Exhibit A is the Notice of Recordation of Assignment document for the present application, indicating that the present application is assigned to Dell Products L.P. Nguyen and the pending application were, at the time the invention of the pending application was made, owned or subject to an obligation to Dell Products L.P. Applicants respectfully submit that the rejections of claims 2, 3, 5, 7, 9-13, 15-20, and 23-34 should be withdrawn and these claims should be passed to issuance.

Conclusion

Applicants respectfully submit that pending claims 1-3, 5, 7, 9-26, 28, 30-34 of the present invention are allowable. Applicants respectfully request that these claims be passed to issuance.

Respectfully submitted,



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Baker Botts Docket Number: 016295.0641

Date: October 4, 2004

Exhibit A



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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
CHERIAN, JACOB

DOC DATE: 03/23/2001

ASSIGNOR:
KOCIS, THOMAS J.

DOC DATE: 03/23/2001

ASSIGNEE:
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SERIAL NUMBER: 09770907
PATENT NUMBER:

FILING DATE: 01/26/2001
ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
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1-31-92

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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of Conveying Party(ies): ALL INDIVIDUALS

Jacob Cherian
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Austin, Texas 78758

Thomas J. Kocis
11505 Citrus Cove
Austin, Texas 78750

Additional name(s) of conveying party(ies) attached?

Yes ☒ No ☐

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: March 23, 2001

2. Name and Address of receiving Party(ies):

Name: Dell Products L.P.

Street Address:

One Dell Way

City: Round Rock State: Texas Zip: 78682-2244

Additional name(s) & address(es) attached?

Yes ☐ No ☒

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s) 09/770,907

B. Patent No.(s)

Additional Number(s) attached?

Yes ☐ No ☒

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Roger Fulghum
Internal Address: Baker Botts L.L.P.
Street Address: One Shell Plaza
910 Louisiana

City: Houston
State: Texas Zip: 77002-4995

6. Total number of applications and patents involved: One

7. Total Fee (37 CFR 3.41): \$40.00

☒ Enclosed
☐ Authorized to be charged to deposit account

8. Deposit account number:

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Roger Fulghum

Name of Person Signing

Signature

May 4, 2001

Date

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ASSIGNMENT

WHEREAS, I, one of the undersigned joint inventors, of residence as listed, have invented certain new and useful improvements, for which application for United States Letters Patent is made, titled "System and Method for Matching Storage Device Queue Depth to Server Command Queue Depth" filed January 26, 2001 and having Application Serial No. 09/770,907; and

WHEREAS, Dell Products L.P. (hereinafter referred to as "Assignee"), a Texas limited partnership, with an address of One Dell Way, Round Rock, Texas 78682-2244, desires to acquire my entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I assign to Assignee, all right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all provisionals, divisions, reissues, continuations, continuations-in-part and extensions thereof; and I authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as my interest is concerned, to Assignee.

I also assign to Assignee, all right, title and interest in and to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world, including all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and I further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such right, title and interest in Assignee.

I will communicate to Assignee any facts known to me respecting any improvements; and, at the expense of Assignee, I will testify in any legal proceedings, sign all lawful papers, execute all provisionals, divisional, continuation, continuation-in-part, reissue and substitute applications, make lawful oaths and declarations, and generally do everything possible to vest title in Assignee and to aid Assignee to obtain

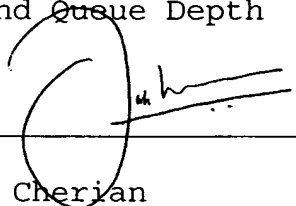
and enforce proper protection for said invention in all countries.

This Assignment shall be binding on the parties' successors, assigns and legal representatives.

Title of Invention:

System and Method for
Matching Storage Device
Queue Depth to Server
Command Queue Depth

Signature of First Inventor:



Inventor's Name:


Jacob Cherian

Residence (City, County, State): Austin, Travis County, Texas

Date:

03/23/2001

Signature of Second Inventor:



Inventor's Name:

Thomas J. Kocis

Residence (City, County, State): Austin, Travis County, Texas

Date:

3/23/2001

Pursuant to 37 C.F.R. § 1.8, I hereby certify that I have information and a reasonable basis for belief that this correspondence will be deposited as first-class mail with the United States Postal Service in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231 on May 4, 2001.


Signature

5-4-01
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Cherian et al.

Serial No.: 09/770,907

Filed: January 26, 2001

For: System and Method for Matching Storage §
Device Queue Depth to Server Command §
Queue Depth §

Box Assignment
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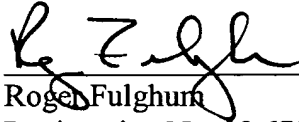
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COMMUNICATION

Enclosed for recordation is the assignment of Jacob Cherian and Thomas J. Kocis to Dell Products L.P. Also enclosed is a recordation form cover sheet and a fee of \$40.00 for recordation. 37 C.F.R. § 1.21(h).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Roger Fulghum', is written over a horizontal line.

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